WHAT IS CLAIMED IS :

1. A bismuth yttrium titanate (BYT) thin film having the composition of formula (I):

$$Bi_{4-x}Y_xTi_3O_{12} \qquad (I)$$

wherein x is an integer of 0.1 to 2.

2. A process for preparing a bismuth yttrium titanate (BYT) thin film according to claim 1, which comprises bringing the vapors of a Y precursor, a Ti precursor and a Bi precursor into contact with the substrate, together with an oxygen source.

3. The process of claim 2, wherein the Ti precursor is selected from the group consisting of $Ti(dmae)_4$(titanium tetradimethylaminoethoxide), $Ti(dmap)_4$(titanium tetradimethylaminopropanol), $Ti(i\text{-}OPr)_4$, $Ti(N(C_2H_5)_2)_4$, $Ti(N(CH_3)_2)_4$ and $Ti(N(C_2H_5)(CH_3))_4$.

4. The process of claim 2, wherein the Bi precursor is selected from the group consisting of $Bi(phenyl)_3$, $Bi(tmhd)_3$ (tmhd=tetramethylheptadionate), $Bi(CH_3)_3$, $Bi(O\text{-}t\text{-}(C_4H_9)_3$, $Bi(C_7H_7)_3$, and $Bi(O\text{-}t\text{-}(C_5H_{11})_3$.

5. The process of claim 2, wherein the Y precursor is selected from the group consisting of $Y(tmhd)_3$-PMDT (tmhd=tetramethylheptadionate, PMDT=pentamethyldiethylenetriamine), $Y(tmhd)_3$ and $Y(N(Si(CH_3)_3)_2)_3$.

6. The process of claim 2, wherein the substrate was heated to a temperature ranging from 250 to 700℃.

7. The process of claim 2, wherein the precursor vapors are generated by dissolving the precursors in an organic solvent and subjecting the solution to a temperature ranging from 200 to 300℃.

8. The process of claim 2, which further comprises heat-treating the BYT thin film at 500 to 800 ℃ to impart crystallinity thereto.

9. An electric or electronic device comprising the BYT thin film according to claim 1.